

Work Order ID 63813

Monday, November 15, 2010 8:36:52 AM



Page 1

Item ID: D412-666-011

Accept



Setup Start



Revision ID:

Item Name: Gross Weight Towing

Stop



Start Date: 11/15/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 11/22/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

[Signature]

Date: 10-11-15

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

IIN D412-666

Rev C1

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP412-666-011

CHG 004

8.01.11/17

[Signature] BG 10-11-15 (2)

110

0.00



Pick Kit

Packaging

Memo

0.00

Packaging

10/11/17 (2x) SP

120

0.00



QC4-.100% Inspect kits for completeness

QC

Memo

0.00

Quality Control

8.01.11/17



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

0.00



Packaging

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D412-666-011

Location: 31A

PPP Rev: E

10/11/18 20 J

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/11/18 J

10-11-18 21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 1

Work Order ID: 63813

Parent Item: D412-666-011

Parent Item Name: Gross Weight Towing

Start Date: 11/15/2010

Required Date: 11/22/2010

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:B Added GHG 002 NG 02-03-06
IPP Rev:C As per Rev C JLM 07-09-07 Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

AN6-15A Bolt		Purchased	No				Each	22.0000	4	8		10/14/17	SL
-----------------	--	-----------	----	--	--	--	------	---------	---	---	--	----------	----

Location	Loc Qty	Loc Code
ST342	22	
111425	2	
114941	20	

AN6-45A Bolt		Purchased	No				Each	49.0000	4	8		10/14/17	SL
-----------------	--	-----------	----	--	--	--	------	---------	---	---	--	----------	----

Location	Loc Qty	Loc Code
ST344	49	
115802	49	

AN960JD616 Washer	NAS1149D0663J	Purchased	No				Each	0.0000	8	16		11/15/17	SL
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D2888 Lug		Manufactured	No				Each	11.0000	2	4		10/14/17	SL (20)
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Location	Loc Qty	Loc Code
ST480	11	
54497	1	
56575	10	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Picklist Print

Monday, November 15, 2010 8:36:57 AM

Page 2

Work Order ID: 63813

Parent Item: D412-666-011

Parent Item Name: Gross Weight Towing



Start Date: 11/15/2010

Required Date: 11/22/2010

Start Qty: 2.00

Required Qty: 2.00

MS21042L6

Purchased

No

Each

211.0000

4

'8



10/11/17 Sgx

Nut

Location

Loc Qty

Loc Code

ST300

211

111578

4

114495

1

115300

156

116102

50

8

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Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

1.0 APPLICABILITY:

GROSS WEIGHT TOWING KIT D412-666-011 MAY BE INSTALLED ON DART D205-634-XXX OR D204-635-XXX OR D412-742-XXX SKIDTUBES INSTALLED ON 412 AIRCRAFT TO ALLOW GROUND HANDLING AT GROSS WEIGHT IN ACCORDANCE WITH BELL SERVICE INSTRUCTION BHT-412-SI-58. IT IS ALSO ACCEPTABLE TO INSTALL THIS KIT ON 204/205/210/212 AIRCRAFT EQUIPPED WITH DART SKIDTUBES IN ORDER TO PRESERVE THE LIFE OF THE AFT CROSSTUBES. THIS KIT CONTAINS ENOUGH PARTS TO INSTALL D2888 LUGS ON BOTH SKIDTUBES.

2.0 PARTS LIST:

QTY -011	PART	DESCRIPTION
X	D412-666-011	GROSS WEIGHT TOWING KIT
2	D2888	LUG
4	AN6-15A	BOLT
4	AN6-45A	BOLT
8	AN960JD616	WASHER
4	MS21042L6	NUT (or MS21042-6)



REFERENCE ONLY

3.0 WEIGHT AND BALANCE:

INSTALLATION	WEIGHT	LONGITUDINAL	
		ARM	MOMENT
D412-666-011	1.90 lb 0.86 kg	163.0 in 4.14 m	310 in lb 3.56 m kg

4.0 PROCEDURE:

- 1) REMOVE AN6-12A BOLTS (4) ON INBOARD SIDE OF AFT SADDLE AND DISCARD. ON LANDING GEAR WITH DART AFT CROSSTUBES, REMOVE (4) AN6-40A BOLTS.
- 2) INSTALL D2888 LUGS WITH AN6-15A BOLTS (2) AS SHOWN IN FIGURE 1. USE AN6-45A (2) BOLTS ON DART CROSSTUBES, AS SHOWN IN FIGURE 2.
- 3) TORQUE BOLTS TO 95-110 in-lb (10.7-12.4 N-m).

5.0 NOTE:

IT IS ACCEPTABLE TO REPLACE THE AN6-15A/45A BOLTS WITH LONGER OR SHORTER AN6 BOLTS AS REQUIRED AND/OR INSTALL EXTRA AN960JD616 WASHERS UNDER NUT TO ENSURE 1.5 TO 4 THREADS IN SAFETY.

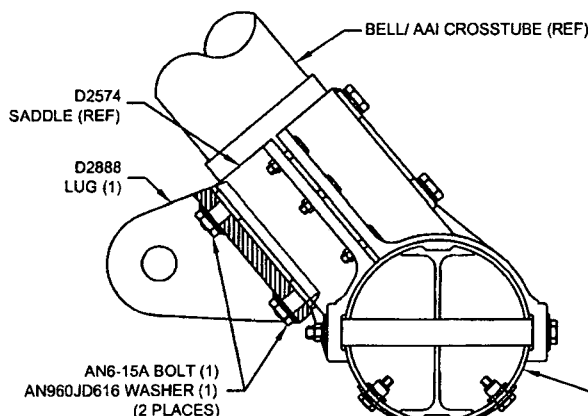


FIGURE 1
(BELL/AAI CROSSTUBES)

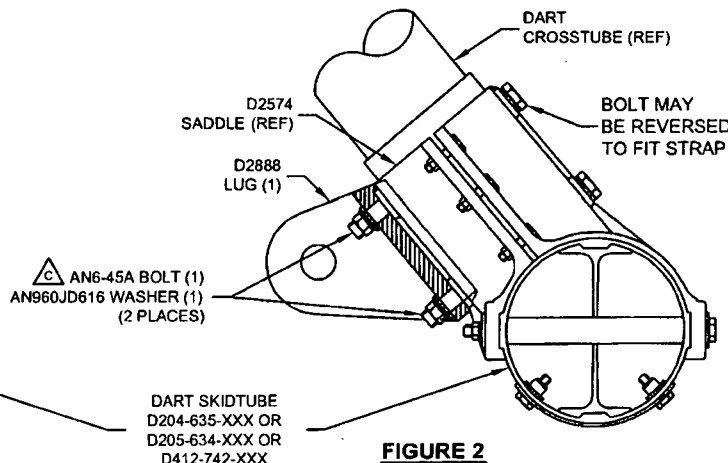


FIGURE 2
(DART CROSSTUBES)

C	- AN6-45A WAS AN6-43A, ADD NOTES - TO ENSURE COMPATIBILITY WITH D412-742-011/-013 - ESTIMATE (PARTS/PICK LIST) IS AFFECTED	MB	07.08.09
B	UPDATE KIT FOR BOTH SKIDTUBES AND COMPATIBILITY WITH DART CROSSTUBES	CP	02.03.04
A	NEW ISSUE	CP	99.05.03
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	N/A	D412-666	SHEET 1 OF 1
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	412 GROSS WEIGHT TOWING KIT	1:4
DATE	07.08.10	COPYRIGHT © 1999 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DART

DESIGN #	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED OS	DRAWING NO. DSI 9152	REV.B SHEET 1 OF 1
DATE 99.10.01		TITLE OPTIONAL SKIDTUBE KITS	SCALE NTS
A	99.04.08	NEW ISSUE	
B	99.10.01	ADD D412-673-011	

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D205-634 (REV. B)

REFERENCE ONE

REF. CANADIAN STA: SH96-88
US FAA STC: SR00563NYTHE FOLLOWING OPTIONAL KITS MAY BE PURCHASED FROM DART AEROSPACE FOR
INSTALLATION ON DART D205-634-011 SKIDTUBES.

KIT	DESCRIPTION	AIRCRAFT	PURPOSE
D205-665-015	CABLE GUARD KIT	205A/205A-1/ 205B/212/412/ 412CF/412EP	TO PROTECT THE SKIDTUBE FROM DAMAGE FROM HOIST KIT CABLES
D412-666-011	GROSS WEIGHT TOWING KIT	412/412CF/412EP	TO ALLOW FOR GROSS WEIGHT TOWING OF THE AIRCRAFT IN ACCORDANCE WITH BHT-412-SI-58
D412-673-011	ELECTRIC STEP KIT	205A/205A-1/ 205B/212/412/ 412CF/412EP	TO ALLOW INSTALLATION OF BELL 212-706-105-003 ELECTRIC RETRACTING STEP